

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

**SECOND AMENDMENT TO AGREEMENT FOR
PROFESSIONAL ENVIRONMENTAL SERVICES**

THIS AMENDMENT, is made and entered into by and between Fort Bend County (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and SWCA Environmental Consultants, (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WHEREAS, the parties executed and accepted that certain Agreement for Professional Environmental Services on December 16, 2014, (hereinafter "Agreement") pursuant to SOQ 14-025; as amended by instrument dated October 6, 2015 (hereinafter "Amendment"); and

WHEREAS, the parties desire to amend the Agreement to include additional services specifically related to the Sugar Land-Howell Project No. 13211, the Beechnut Street Project No. 13201, and the Lake Olympia Parkway – Segment 1 Project No. 13207.

NOW, THEREFORE, the parties do mutually agree as follows:

1. Services to be rendered under the Agreement shall be amended to add an evaluation of the need for a U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 permit for the proposed Projects, as described in the Proposal dated November 18, 2015, attached hereto as Exhibit A, the Proposal dated November 18, 2015, attached hereto as Exhibit B, and in the Proposal dated February 19, 2016, attached hereto as Exhibit C, all three incorporated herein for purposes.
2. County shall pay Contractor an additional seventy-one thousand forty-two dollars and no/100 (\$71,042.00), for the additional professional environmental services, specifically described as Tasks 1 – 4 on Exhibits A, B, and C, to be rendered for all three Projects under this Amendment.
3. The Maximum Compensation payable to Contractor for Services rendered is hereby increased to an amount not to exceed one hundred forty-nine thousand nine hundred eighty-eight dollars and no/100 (\$149,988.00), authorized as follows:
 - A. \$35,846.00 under the Agreement;
 - B. \$43,100.00 under the Amendment; and
 - C. \$71,042.00 under this Second Amendment; of which –
 - i. \$20,523.00 is allocated to and funded by the Sugar Land-Howell Project No. 13211 in Exhibit A (Tasks 1 – 4 only), and
 - ii. \$20,523.00 is allocated to and funded by the Beechnut Street Project No. 13201 in Exhibit B.

- iii. \$29,996.00 is allocated to and funded by the Lake Olympia Parkway – Segment 1 Project No. 13207
- 4. In no case shall the amount paid by County for all Services under the Agreement, the Amendment, and this Second Amendment, including Services described as "Optional Tasks", exceed the Maximum Compensation without a written agreement executed by the parties.
- 5. The Time of Performance is extended to end no later than twenty-four (24) months after Contractor's receipt of Notice to Proceed issued by County under this Second Amendment.

Except as provided herein, all terms and conditions of the Agreement shall remain unchanged.

FORT BEND COUNTY

SWCA ENVIRONMENTAL CONSULTANTS

Robert E. Hebert, County Judge



Matt Stahman, Principal

Date



Date

ATTEST:

Laura Richard, County Clerk

APPROVED:

Richard W. Stolleis, P.E., County Engineer

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$ _____ to accomplish and pay the obligation of Fort Bend County under this contract.

Robert Edward Sturdivant, County Auditor

I:\Marcus\Agreements\Engineering\Road Construction\Env Consulting - 2013 Mobility\Amendment 2 - Environmental Svcs.SWCA.v2.docx

EXHIBIT A



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.®

Houston Office
10245 West Little York Road, Suite 600
Houston, Texas 77040
Tel 281.617.3217 Fax 281.617.3227
www.swca.com

2/36

November 18, 2015

Submitted via e-mail: stacy.slawinski@fortbendcountytexas.gov

Mr. Stacy Slawinski
Assistant County Engineer
Fort Bend County Engineering
301 Jackson St., 4th Floor
Richmond, Texas 77469

Re: Proposal/Cost Estimate Wetland Delineation, USACE Permitting, and Associated Environmental Services for Proposed Improvements to Sugar Land - Howell Road between Bissonnet Street and Old Richmond Road (FB Project 13211)

Dear Mr. Slawinski:

Thank you for allowing SWCA Environmental Consultants (SWCA) the opportunity to submit this proposal and cost estimate to the Fort Bend County Engineering Department (FBCED) for the proposed improvements to FB Project 13211: Sugar Land – Howell Road between Bissonnet Street and Old Richmond Road (proposed project). This scope and cost estimate covers the environmental consulting services necessary to evaluate the need for a U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 permit and associated environmental services for the proposed project. The work to be performed by SWCA shall consist of providing professional consulting services, including performing wetland delineations, ordinary high water mark (OHWM) delineations, cultural resources analysis, and Section 404 permitting consulting related to the proposed project in Fort Bend County. The proposed project length is approximately 0.63 mile. The project proposes to expand Sugar Land – Howell Road from a two-lane road to a three-lane road with concrete curb and gutter from Bissonnet Street to Old Richmond Road within the existing right-of-way (ROW). The project design proposes to incorporate a storm drain outfall into an adjacent channel, and sidewalks for its entire length. In addition, the sidewalk will also serve as a bicycling lane that is proposed to parallel Keegans Bayou and under the existing bridge structure that is part of the proposed bridge widening. The scope of professional environmental consulting services is outlined below. SWCA will coordinate throughout the project with the FBCED, Program Manager, RPS Klotz Associates, and design engineer.

The following paragraphs provide the scope of work and cost estimate for wetland delineation, USACE Section 404 permit, cultural resources, and associated services.

SCOPE OF WORK

TASK 1 – WETLAND DELINEATION

SWCA will conduct a wetland delineation to identify and map potential waters of the United States, including wetlands, within the proposed project boundaries (existing roadway ROW). Identification of wetlands will be based upon the routine delineation methodology published in the 1987 *Corps of Engineers Wetlands Delineation Manual* (1987 Manual)



and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0)*. This methodology includes documentation of vegetation changes in both wetland and upland communities with representative data points. The OHWM of non-wetland waters within the property boundaries will be identified and delineated based on USACE regulations found at 33 Code of Federal Regulations (CFR) 328.3(e). It is estimated that one field day consisting of two wetland delineators will be required to complete the delineation of the 0.63 mile of proposed roadway ROW.

Data point locations, wetland boundaries, and OHWM limits will be digitally mapped using a Trimble XH or XT differentially-corrected global positioning system (DGPS). Field activities include:

- Walking the ROW to review site conditions including soils, hydrology, and vegetation.
- Conducting field investigations to identify wetlands, completing wetland data forms, establishing data points, and mapping perimeter of delineated wetlands.
- Once wetland and waterbody boundaries are determined within the proposed ROW, SWCA will provide the shapefiles to the FBCED for the distribution to the design engineer for planning/design purposes.

As of October 9, 2015, there is a stay of implementation of the U.S. Environmental Protection Agency's (EPA) new Clean Water Rule by the U.S. Court of Appeals for the Sixth Circuit Court. Therefore, at this time, it is assumed that the current jurisdictional determination will be implemented for this project. The SWCA team would be able to adapt quickly to any change to this ruling and apply it to the project (if necessary).

TASK 2 – WETLAND DELINEATION REPORTING

SWCA will prepare a written report that summarizes the methods and findings of the wetland delineation. SWCA will also prepare aerial and topography-based exhibits depicting the location of (if they occur) any mapped waters of the United States, including wetlands and their boundaries, found within the proposed project ROW. The report will include descriptions and acreages of all wetlands and non-wetland waters and a preliminary analysis as to whether each potential water of the United States is jurisdictional under the CWA. Copies of data sheets and site photographs will also be included in the reports.

The reports will provide sufficient data suitable for verification by the USACE, if necessary. Otherwise, SWCA will submit two hardcopies/one electronic copy of the report to FBCED. The reports will also assist in determining Section 404 permitting requirements for the project.

If necessary, SWCA will assist the USACE with a preliminary jurisdictional determination (PJD) by providing nearly complete PJD forms for their use. These forms are required by the USACE when preliminary jurisdictional determinations are sought by the applicant to obtain an opinion on the jurisdictional status of wetlands and non-wetland waters on the property. The USACE may visit the site during the PJD process and if requested, SWCA will accompany them on the site visit.

TASK 3 – CULTURAL RESOURCES CONSTRAINTS ANALYSIS AND AGENCY COORDINATION

SWCA will conduct a cultural resources constraints analysis of the proposed project area. The goals of the constraints analysis will be to gather all available information regarding previous surveys for cultural resources, previously documented cultural resources including archaeological sites and aboveground historical resources, identify the potential for these resources to affect future development, and determine the scope of further possible archaeological regulatory compliance work on the property, if any, such as pedestrian surveys.



SWCA has already completed a background archaeological literature and records search of the proposed project area. SWCA will additionally evaluate other critical factors including the level of previous disturbances from road construction and residential and/or commercial development, types of soils, and any obvious standing structures that appear on U.S. Geological Survey (USGS) topographic maps. This task will allow SWCA to identify any areas within the project area that have potential to contain significant, undocumented archaeological sites. With this information, SWCA will be able to evaluate archaeological potential and concerns as well as the probable level of archaeological effort that would be required to obtain compliance with any applicable federal or state cultural resources regulations.

Once review is completed and the results are reviewed, SWCA will prepare a brief letter report of the constraints analysis. This report will document the methodology used in the investigation, the presence and condition of any previously recorded sites and/or surveys revealed in the literature review, and provide estimates on the level of future archaeological work, if any, that may be necessary to satisfy potentially applicable federal or state cultural resources laws. SWCA will provide a draft report to the client for review and approval, followed by a final report incorporating all comments and suggestions from the client. This letter can then be used in coordination with the Texas Historical Commission (THC) and USACE to either dismiss the need for any further archaeological investigation or minimize the scope of such investigations should they be requested.

TASK 4 – PERMITTING ASSESSMENT

Following the field surveys, preliminary data analysis, and draft report preparation, SWCA will assess the extent and types of proposed impacts to potential waters of the United States, including wetlands, regulated by Section 404 of the CWA. Depending on the scope of impacts, it is anticipated at this time that the construction of the proposed project would be authorized under Nationwide Permit (NWP) 14, Linear Transportation Activities. NWP 14 limits impacts to 1/2 acre of waters of the United States, including wetlands. Though not anticipated, if the construction of the proposed outfall structures impact waters of the United States a NWP 7 Outfall Structures and Associated Intake Structures with a Pre-Construction Notification (PCN) would be required. SWCA will determine the need for a permit, NWP 14 or NWP 7, based on survey results, potential impacts, meetings with FBCED, and the USACE (if necessary). SWCA will meet with the engineering design team to discuss potential impacts and ways to minimize and avoid potential impacts, if necessary. SWCA will advise FBCED whether a permit is required and, if so, whether NWP 14 or NWP 7 are applicable. If potential impacts cannot be covered under NWP 14 or NWP 7, SWCA will advise FBCED of the appropriate permit to pursue. No other permits, such as an Individual Permit, are included in this scope and cost at this time. If no permit is required, the reports for Task 3 and 4 above will serve as agency non-reporting for the purposes for FBCED project administrative files.

OPTIONAL TASKS

Additional services may be required for the proposed project. Any additional services required will not be initiated without FBCED approval.

TASK 5 – CLEAN WATER ACT (SECTION 404) USACE NATIONWIDE PERMIT PCN FOR NWP 14 OR 7 AND FUNCTIONAL ASSESSMENT (OPTIONAL)

If it is determined during the permitting assessment that the proposed project would require a PCN, SWCA will prepare a PCN package to submit to the USACE Galveston District. The PCN document will address the following application requirements:

1. Identification of the applicant
2. Point-of-contact



3. Project description, location, and purpose
4. Identification of adjacent property owners
5. Site photographs
6. Direct and indirect environmental effects of the regulated activity
7. Avoidance and minimization efforts
8. Proposed mitigation plan (see Task 5 below)
9. Wetland delineation report
10. PJD Forms
11. Other information that may be required for agency coordination (threatened and endangered species and cultural resources)

The PCN will include exhibits, permit design drawings, and other details to facilitate an understanding of the proposed action. These exhibits/drawings include topographic maps, aerial photographs, design plan views, cross-sections, and elevations of the basins. FBCED (or its representative project engineer) will prepare the plan and cross-section drawings and provide review of these drawings. All other exhibits will be prepared by SWCA. All drawings and exhibits submitted as part of the PCN must be in reproducible black-and-white in 8 1/2 x 11 format.

Once project design provides details to determine potential impacts to wetlands and waters of the United States, SWCA will conduct a wetland functional assessment in order to quantify the number of wetland mitigation credits necessary to compensate for the proposed project's unavoidable impacts. SWCA will conduct this assessment using the USACE Galveston District's Interim Hydrogeomorphic Method (iHGM). The iHGM assessment involves quantification of multiple wetland functional parameters including tree density counts, tree species richness determinations, tree basal diameter measurements, coarse wood debris counts, absorptive soil properties, herbaceous coverage, and mid-story coverage.

Though not anticipated at this time, SWCA can also conduct, if needed, a stream reach assessment for impacted streams within the project area. SWCA will use the USACE Galveston District's Stream Condition Assessment Procedure (SCAP). SWCA assumes a Level 1 SCAP effort, which is approved for impacts to intermittent and perennial waters less than 500 linear feet. The cost of a Level 1 SCAP will be covered under a separate scope.

TASK 6 – WETLAND MITIGATION PLAN (OPTIONAL)

SWCA will prepare a mitigation plan, if necessary, following the guidelines of the EPA's 2008 document titled *Compensatory Mitigation for Losses of Aquatic Resources; Final Rule* (2008 Final Mitigation Rule). The mitigation plan will address the proposed impacts to waters of the United States, describe measures taken to avoid and minimize those impacts to the maximum extent practicable, and propose measures to mitigate those impacts. SWCA assumes that the project will use mitigation banks to compensate for impacts to waters of the United States; however, it is unknown at this time if mitigation banks can be used because of the project location and proximity to mitigation banks with limited credit availability.

This scope and cost does not include development of a project specific permittee-responsible mitigation (PRM) plan. Should a PRM become necessary, SWCA, in consultation with the project team and regulatory agencies, can develop a detailed mitigation plan or assist a third party in the development of the PRM plan consistent with the Mitigation Rule detailed in 40 CFR 332.4. The plan would be developed based on project site elements and plans, regional conservation initiatives, or other opportunities as identified through resource agency and public communication. This element of the



permitting process can be highly variable with meetings, site visits, feasibility reports, and coordination dominating the effort. SWCA can identify, or can assist in identifying, available mitigation sites and concepts for the proposed project and the necessary work required to compensate for wetland impacts given specific site conditions at both the project site and the mitigation site.

The detailed mitigation plan development includes specific actions to be taken to ensure that function and value of impacted wetlands are compensated for with the mitigation action and consistent with the elements of the Mitigation Rule. Elements of the detailed mitigation plan will include, as applicable, location exhibits, conservation contracts, and an alternatives analysis.

The cost for third party PRM cannot be determined at this time and will be covered under a separate scope. Please note that SWCA's cost provided does not include the cost of mitigation itself. That cost cannot be accurately determined until actual project impacts have been assessed.

TASK 7 – MIGRATORY BIRD TREATY ACT PRE-CONSTRUCTION FIELD SURVEYS (OPTIONAL)

The Migratory Bird Treaty Act (MBTA) passed in 1918, states that it is illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird. Under this Act avoidance of impacts to active nests is necessary. Pre-construction surveys, while not required, can ensure no impacts occur.

Prior to any clearing or grading activities conducted in avian breeding season (February-September), SWCA can conduct pedestrian surveys of the project area to locate active nests, if requested by FBCED. Once a nest is observed, its approximate location would be recorded with a GPS. Additionally, information on each species (as possible), activity status, absence/presence of adult or juvenile birds, and habitat would be recorded for each nest observed. Photographs would also be taken and the nest flagged. A letter report and shapefile could be submitted to FBCED to document the location of all active nests found.

ADDITIONAL ASSUMPTIONS/CONSIDERATIONS

- SWCA will be responsible for the daily management of the environmental services for this proposed project. Frequent and appropriate communications will be maintained between SWCA and FBCED in an effort to expedite completion of the project.
- SWCA assumes a 1-day effort utilizing a 2-person crew to complete the pedestrian natural resource survey.
- No archaeological field surveys and preparation of an Archaeological Resources Survey Report are included in this proposal. If these services are required after consultation with the USACE and THC, a Change Order can be provided.
- The ROW will be clearly demarcated in the field or an accurate .shp or .kmz file will be provided in advance of surveys to ensure an accurate assessment.
- SWCA assumes a maximum of one meeting with USACE and two meetings with FBCED and/or representative project engineering firm will be necessary for the Permitting Assessment (part of Task 4).
- SWCA assumes a maximum of two meetings with the USACE Galveston District will be necessary for a NWP 14 or NWP 7 PCN.
- No preparation of an Individual Permit and associated functional assessment under the CWA, Section 404 or any other permit preparation are included in this proposal. If these services are required after determination of potential impacts and consultation with USACE and FBCED, a Change Order can be provided.



Proposal/Cost Estimate Wetland Delineation, USACE Permitting, and Associated Environmental Services for Proposed Improvements to Sugar Land - Howell Road between Bissonnet Street and Old Richmond Road (FB Project 13211)

- The cost does not include an approved jurisdictional determination (AJD). If the FBCED elects to pursue an AJD, the work will be covered under another scope and cost.
- The estimate is based on SWCA's current project understanding and subsequent design changes may warrant change orders.
- This scope and cost estimate does not include wetland delineation or functional habitat assessment of any proposed mitigation sites. Scope and cost assumes use of mitigation banks and does not include development of a PRM mitigation plan.
- Costs associated with significance testing or mitigation of archeological or historic resources are not included in this proposal.

COST ESTIMATE SUMMARY

SWCA's cost estimate, listed by task, is provided in the table below. **The TOTAL LUMP SUM AMOUNT for these tasks is \$44,414.** SWCA will initially conduct authorized tasks (Tasks 1 – 4) described in this proposal for a lump sum amount of \$20,523. Optional tasks (Tasks 5 – 7) described in this proposal for a lump sum amount of \$23,891 may be warranted dependent upon the permitting process and will not be initiated until approved by FBCED. Invoicing will be once per month.

Table 1. Cost estimate by task.

TASK	DESCRIPTION	COST
1	Wetland Delineation	\$7,591
2	Wetland Delineation Reporting	\$6,841
3	Permitting Assessment	\$4,434
4	Cultural Resources Constraints Analysis	\$1,657
	TASKS 1 – 4 TOTAL	\$20,523
	Optional Tasks	
5	Pre-construction notification (PCN) and Functional Assessment (Optional)	\$18,050
6	Wetland Mitigation Plan (Mitigation Bank Option Only) (Optional)	\$2,917
7	MBTA Pre-construction surveys (Optional)	\$2,924
	TASKS 5 – 7 TOTAL	\$23,891
	TOTAL	\$44,414



Proposal/Cost Estimate Wetland Delineation, USACE Permitting, and Associated Environmental Services for Proposed Improvements to Sugar Land - Howell Road between Bissonnet Street and Old Richmond Road (FB Project 13211)

If you have any questions or require any additional information, please call 281.617.3217 or e-mail (kwinkler@swca.com). Thank you for the opportunity to assist with this project.

Sincerely,

A handwritten signature in black ink that reads "Kerry Winkler".

Kerry Winkler
Senior Project Manager

cc: Matt Stahman, SWCA, Houston Principal

EXHIBIT B



Sound Science. Creative Solutions.®

Houston Office
10245 West Little York Road, Suite 600
Houston, Texas 77040
Tel 281.617.3217 Fax 281.617.3227
www.swca.com

November 18, 2015

Submitted via e-mail: stacy.slawinski@fortbendcountytexas.gov

Mr. Stacy Slawinski
Assistant County Engineer
Fort Bend County Engineering
301 Jackson St., 4th Floor
Richmond, Texas 77469

Re: Proposal/Cost Estimate Wetland Delineation, USACE Permitting, and Associated Services for Proposed Improvements to Beechnut Street between FM 1464 and Lobera Drive (FB 13201)

Dear Mr. Slawinski:

Thank you for allowing SWCA Environmental Consultants (SWCA) the opportunity to submit this proposal and cost estimate to the Fort Bend County Engineering Department (FBCED) for the proposed improvements to Beechnut Street between FM 1464 and Lobera Drive (FB Project 13201) (proposed project). This scope and cost estimate covers the environmental consulting services necessary to evaluate the need for a U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 permit for the proposed project. The work to be performed by SWCA shall consist of providing professional consulting services, including performing wetland delineations, ordinary high water mark (OHWM) delineations, cultural resources analysis, and Section 404 permitting consulting related to the proposed project in Fort Bend County. The proposed project length is approximately 0.88 mile. The project proposes to widen Beechnut Street from a two-lane road to a four-lane boulevard with concrete curb and gutter and storm sewer from FM 1464 to Lobera Drive. The scope of professional environmental consulting services is outlined below. SWCA will coordinate throughout the project with the FBCED, Program Manager, RPS Klotz Associates, and design engineer.

The following paragraphs provide the scope of work and cost estimate for wetland delineation, USACE Section 404 permit, cultural resources, and associated services.

SCOPE OF WORK

TASK 1 – WETLAND DELINEATION

SWCA will conduct a wetland delineation to identify and map potential waters of the United States, including wetlands, within the proposed project boundaries, which is the existing roadway right-of-way (ROW). The existing roadway ROW is typically 100 feet wide. Identification of wetlands will be based upon the routine delineation methodology published in the 1987 *Corps of Engineers Wetlands Delineation Manual* (1987 Manual) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0)*. This methodology includes documentation of vegetation changes in both wetland and upland communities with representative data points. The OHWM of non-wetlands waters within the property boundaries will be identified and delineated based on USACE



regulations found at 33 Code of Federal Regulations (CFR) 328.3(e). It is estimated that one field day consisting of two wetland delineators will be required to complete the delineation of the 0.88 mile of proposed project area.

Data point locations, wetland boundaries, and OHWM limits will be digitally mapped using a Trimble XH or XT differentially-corrected global positioning system (DGPS). Field activities include:

- Walking the ROW to review site conditions including soils, hydrology, and vegetation.
- Conducting field investigations to identify wetlands, completing wetland data forms, establishing data points, and mapping perimeter of delineated wetlands.
- Once wetland and waterbody boundaries are determined within the proposed project area, SWCA will provide the shapefiles to the FBCED for the distribution to the design engineer for planning/design purposes.

As of October 9, 2015, there is a stay of implementation of the U.S. Environmental Protection Agency's (EPA) new Clean Water Rule by the U.S. Court of Appeals for the Sixth Circuit Court. Therefore, at this time, it is assumed that the current jurisdictional determination will be implemented for this project. The SWCA team would be able to adapt quickly to any change to this ruling and apply it to the project (if necessary).

TASK 2 – WETLAND DELINEATION REPORTING

SWCA will prepare a written report that summarizes the methods and findings of the wetland delineation. SWCA will also prepare aerial and topography-based exhibits depicting the location of (if they occur) any mapped waters of the United States, including wetlands and their boundaries, found within the proposed project ROW. The report will include descriptions and acreages of all wetlands and non-wetland waters and a preliminary analysis as to whether each potential water of the United States is jurisdictional under the CWA. Copies of data sheets and site photographs will also be included in the reports.

The reports will provide sufficient data suitable for verification by the USACE, if necessary. Otherwise, SWCA will submit two hardcopies/one electronic copy of the report to FBCED. The reports will also assist in determining Section 404 permitting requirements for the project.

If necessary, SWCA will assist the USACE with a preliminary jurisdictional determination (PJD) by providing nearly complete PJD forms for their use. These forms are required by the USACE when preliminary jurisdictional determinations are sought by the applicant to obtain an opinion on the jurisdictional status of wetlands and non-wetland waters on the property. The USACE may visit the site during the PJD process and if requested, SWCA will accompany them on the site visit.

TASK 3 – CULTURAL RESOURCES CONSTRAINTS ANALYSIS AND AGENCY COORDINATION

SWCA will conduct a cultural resources constraints analysis of the project area. The goals of the constraints analysis will be to gather all available information regarding previous surveys for cultural resources, previously documented cultural resources including archaeological sites and aboveground historical resources, identify the potential for these resources to affect future development, and determine the possible scope of further possible archaeological regulatory compliance work on the property, if any, such as pedestrian surveys.

SWCA has already completed a background archaeological literature and records search of the proposed project area. SWCA will additionally evaluate other critical factors including the level of previous disturbances from road construction and residential and/or commercial development, types of soils, and any obvious standing structures that appear on U.S. Geological Survey (USGS) topographic maps. This task will allow SWCA to identify any areas within the project area that have potential to contain significant, undocumented archaeological sites. With this information,



SWCA will be able to evaluate archaeological potential and concerns as well as the probable level of archaeological effort that would be required to obtain compliance with any applicable federal or state cultural resources regulations.

Once review is completed and the results are reviewed, SWCA will prepare a brief letter report of the constraints analysis. This report will document the methodology used in the investigation, the presence and condition of any previously recorded sites and/or surveys revealed in the literature review, and provide estimates on the level of future archaeological work, if any, that may be necessary to satisfy potentially applicable federal or state cultural resources laws. SWCA will provide a draft report to the client for review and approval, followed by a final report incorporating all comments and suggestions from the client. This letter can then be used in coordination with the Texas Historical Commission (THC) and USACE to either dismiss the need for any further archaeological investigation or minimize the scope of such investigations should they be requested.

TASK 4 – PERMITTING ASSESSMENT

Following the field surveys, report preparation and detailed design, SWCA will assess the extent and types of potential impacts to waters of the United States, including wetlands (if any), regulated by Section 404 of the CWA. Depending on the scope of impacts, it is anticipated at this time that the construction of the proposed project would be authorized under Nationwide Permit (NWP) 14, Linear Transportation Activities without a Pre-Construction Notification (PCN). This permit limits impacts to 1/10 acre of waters of the United States, including wetlands without a PCN. SWCA will evaluate if a permit is required, if a NWP 14 is applicable with or without PCN based on survey results, potential impacts, meetings with FBCED, and the USACE (if necessary). SWCA will meet with the engineering design team to discuss potential impacts and ways to minimize and avoid potential impacts (if any). SWCA will advise FBCED whether a permit is required and, if so, it can be met under a NWP 14. If the proposed project can be covered by a NWP 14 without a PCN, the wetland delineation report will summarize the permitting requirements. If potential impacts cannot be covered under a NWP 14, SWCA will advise FBCED of the appropriate permit to pursue. No other permits, such as a NWP 14 with a PCN or Individual Permit are included in this scope and cost at this time. If no PCN is required, the reports for Task 2 and 3 above and previously prepared environmental constraints analysis will serve as agency non-reporting for the purposes for FBCED project administrative files.

ADDITIONAL ASSUMPTIONS/CONSIDERATIONS

- SWCA will be responsible for the daily management of the environmental services for this proposed project. Frequent and appropriate communications will be maintained between SWCA and FBCED in an effort to expedite completion of the project.
- SWCA assumes a 1-day effort utilizing a 2-person crew to complete the pedestrian natural resource survey.
- No archaeological field surveys and preparation of an Archaeological Resources Survey Report are included in this proposal. If these services are required after consultation with the USACE and THC, a Change Order can be provided.
- It is SWCA's understanding that additional ROW for the project will not be required and that there is no right of entry into properties adjacent to the project corridor. Therefore, the natural resource field survey study area is limited to the existing ROW of Beechnut Street between FM 1464 and Lobera Drive.
- The ROW will be clearly demarcated in the field or an accurate .shp or .kmz file will be provided in advance of surveys to ensure an accurate assessment.
- SWCA assumes a maximum of one meeting with USACE and two meetings with FBCED and/or representative project engineering firm will be necessary for the Permitting Assessment (part of Task 4).



Proposal/Cost Estimate Wetland Delineation, USACE Permitting, and Associated Services for Proposed Improvements to Beechnut Street between FM 1464 and Lobera Drive (FB Project 13201)

- No preparation of an Individual Permit and associated functional assessment under the CWA, Section 404 or any other permit preparation are included in this proposal. If these services are required after determination of potential impacts and consultation with USACE and FBCED, a Change Order can be provided.
- The cost does not include an approved jurisdictional determination (AJD). If the FBCED elects to pursue an AJD, the work will be covered under another scope and cost.
- The estimate is based on SWCA's current project understanding and subsequent design changes may warrant change orders.
- This scope and cost estimate does not include wetland delineation or functional habitat assessment of any proposed mitigation sites. Scope and cost assumes use of mitigation banks and does not include development of a permittee-responsible mitigation plan.
- This scope and cost estimate does not include Migratory Bird Treaty Act (MBTA) pre-construction field surveys. If the FBCED elects to pursue conducting MBTA field surveys, the work will be covered under another scope and cost.
- Costs associated with significance testing or mitigation of archaeological or historic resources are not included in this proposal.

COST ESTIMATE SUMMARY

SWCA's cost estimate, listed by task, is provided in the table below. **The TOTAL LUMP SUM AMOUNT for these tasks is \$20,523.** SWCA will initially conduct authorized tasks (Tasks 1 – 4) described in this proposal for a lump sum amount of \$20,523. No optional tasks are included in this cost estimate. Invoicing will be once per month.

Table 1. Cost estimate by task.

TASK	DESCRIPTION	COST
1	Wetland Delineation	\$7,591
2	Wetland Delineation Reporting	\$6,841
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4	Cultural Resources Constraints Analysis	\$1,657
TASKS 1 – 4 TOTAL		\$20,523

If you have any questions or require any additional information, please call 281.617.3217 or e-mail (kwinkler@swca.com). Thank you for the opportunity to assist with this project.

Sincerely,

Kerry Winkler
Senior Project Manager

cc: Matt Stahman, SWCA, Houston Principal

EXHIBIT C



2136
Sound Science. Creative Solutions.®

Houston Office
10245 West Little York Road, Suite 600
Houston, Texas 77040
Tel 281.617.3217 Fax 281.617.3227
www.swca.com

February 19, 2016

Submitted via e-mail: stacy.slawinski@fortbendcountytx.gov

Mr. Stacy Slawinski
Assistant County Engineer
Fort Bend County Engineering
301 Jackson St., 4th Floor
Richmond, Texas 77469

Re: Proposal/Cost Estimate for Wetland Delineation and Reporting, Cultural Resource Constraints Analysis, and Permitting Assessment for Proposed Construction of Lake Olympia Parkway (Segment 1) between Fort Bend Parkway and California Street (FB Project 13207)

Dear Mr. Slawinski:

Thank you for allowing SWCA Environmental Consultants (SWCA) the opportunity to submit this proposal and cost estimate to the Fort Bend County Engineering Department (FBCED) for the proposed construction of FB Project 13207: Lake Olympia Parkway (Segment 1) between proposed Fort Bend Parkway to California Street (proposed project). This scope and cost estimate covers the environmental consulting services necessary to evaluate the need for a U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 permit and associated environmental services for the proposed project. The work to be performed by SWCA shall consist of providing professional consulting services, including performing wetland delineations, any ordinary high water mark (OHWM) delineations, cultural resources analysis, and assessment of potential Section 404 permitting related to the proposed project in Fort Bend County. During a meeting with FBCED, December 8, 2015, it was decided to proceed with Tasks 1 – 4 at this time to determine the potential Section 404 permitting level of effort. Thus, as appropriate, another proposal and cost may be provided once the Section 404 permitting options are better identified after conducting the wetland delineations and discussions with FBCED, Program Manager and design engineer about potential impacts. The proposed project length is approximately 1.50 mile. The project proposes to extend Lake Olympia on new location between Fort Bend Parkway and California Street. The proposed project is a four-lane with raised median (boulevard) on new location within typical right-of-way (ROW) of 120 feet. The project design proposes to incorporate linear detention for a portion of the length of the proposed project. The scope of professional environmental consulting services is outlined below. SWCA will coordinate throughout the project with the FBCED, Program Manager, RPS Klotz Associates, and design engineer.

The following paragraphs provide the scope of work and cost estimate for wetland delineation, USACE Section 404 permit assessment, cultural resources, and associated services.

SCOPE OF WORK

TASK 1 – WETLAND DELINEATION

SWCA will conduct a wetland delineation to identify and map potential waters of the United States, including wetlands, within the proposed project boundaries (proposed new location ROW). Based on the meeting on December 8, 2015,



SWCA will conduct a wetland delineation wider than the proposed new location ROW (approximately 150 feet wide and completely delineate the boundary (to the south) of a potential wetland identified during aerial mapping review near the east terminus). Identification of wetlands will be based upon the routine delineation methodology published in the 1987 *Corps of Engineers Wetlands Delineation Manual* (1987 Manual) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0)*. This methodology includes documentation of vegetation changes in both wetland and upland communities with representative data points. The OHWM of non-wetland waters within the property boundaries will be identified and delineated based on USACE regulations found at 33 Code of Federal Regulations (CFR) 328.3(e). It is estimated that one field day consisting of two wetland delineators will be required to complete the delineation of the 0.80 mile of proposed roadway ROW.

Data point locations, wetland boundaries, and OHWM limits will be digitally mapped using a Trimble XH or XT differentially-corrected global positioning system (DGPS). Field activities include:

- Walking the ROW to review site conditions including soils, hydrology, and vegetation.
- Conducting field investigations to identify wetlands, completing wetland data forms, establishing data points, and mapping perimeter of delineated wetlands.
- Once wetland and waterbody boundaries are determined within the proposed ROW, SWCA will provide the shapefiles to the FBCED for the distribution to the design engineer for planning/design purposes.

As of October 9, 2015, there is a stay of implementation of the U.S. Environmental Protection Agency's (EPA) new Clean Water Rule by the U.S. Court of Appeals for the Sixth Circuit Court. Therefore, at this time, it is assumed that the current jurisdictional determination will be implemented for this project. The SWCA team would be able to adapt quickly to any change to this ruling and apply it to the project (if necessary).

TASK 2 – WETLAND DELINEATION REPORTING

SWCA will prepare a written report that summarizes the methods and findings of the wetland delineation. SWCA will also prepare aerial and topography-based exhibits depicting the location of (if they occur) any mapped waters of the United States, including wetlands and their boundaries, found within the proposed project ROW. The report will include descriptions and acreages of all wetlands and non-wetland waters and a preliminary analysis as to whether each potential water of the United States is jurisdictional under the CWA. Copies of data sheets and site photographs will also be included in the reports.

The reports will provide sufficient data suitable for verification by the USACE, if necessary. Otherwise, SWCA will submit two hardcopies/one electronic copy of the report to FBCED. The reports will also assist in determining Section 404 permitting requirements for the project.

If necessary, SWCA will assist the USACE with a preliminary jurisdictional determination (PJD) by providing nearly complete PJD forms for their use. These forms are required by the USACE when preliminary jurisdictional determinations are sought by the applicant to obtain an opinion on the jurisdictional status of wetlands and non-wetland waters on the property. The USACE may visit the site during the PJD process and if requested, SWCA will accompany them on the site visit.

TASK 3 – CULTURAL RESOURCES CONSTRAINTS ANALYSIS AND AGENCY COORDINATION

SWCA will conduct a cultural resources constraints analysis of the proposed project area. The goals of the constraints analysis will be to gather all available information regarding previous surveys for cultural resources, previously documented cultural resources including archaeological sites and aboveground historical resources, identify the



potential for these resources to affect future development, and determine the scope of further possible archaeological regulatory compliance work on the property, if any, such as pedestrian surveys.

SWCA has already completed a background archaeological literature and records search of the proposed project area. SWCA will additionally evaluate other critical factors including the level of previous disturbances from road construction and residential and/or commercial development, types of soils, and any obvious standing structures that appear on U.S. Geological Survey (USGS) topographic maps. This task will allow SWCA to identify any areas within the project area that have potential to contain significant, undocumented archaeological sites. With this information, SWCA will be able to evaluate archaeological potential and concerns as well as the probable level of archaeological effort that would be required to obtain compliance with any applicable federal or state cultural resources regulations.

Once review is completed and the results are reviewed, SWCA will prepare a report-form of the constraints analysis. This report-form will document the methodology used in the investigation, the presence and condition of any previously recorded sites and/or surveys revealed in the literature review, and provide estimates on the level of future archaeological work, if any, that may be necessary to satisfy potentially applicable federal or state cultural resources laws. SWCA will provide a draft report-form to the client for review and approval, followed by a final report-form incorporating all comments and suggestions from the client. This report-form can then be used in coordination with the Texas Historical Commission (THC) and USACE to either dismiss the need for any further archaeological investigation or minimize the scope of such investigations should they be requested. SWCA is part of a pilot-program with THC, that allows SWCA to submit the report-form to THC electronically.

TASK 4 – PERMITTING ASSESSMENT

Following the field surveys, preliminary data analysis, and draft report preparation, SWCA will assess the extent and types of proposed impacts to potential waters of the United States, including wetlands, regulated by Section 404 of the CWA. Depending on the scope of impacts, SWCA will determine the need for a permit, Nationwide Permit (NWP) 14 or Individual Permit (IP), based on survey results, potential impacts, meetings with FBCED, and the USACE (if necessary). SWCA will meet with the engineering design team to discuss potential impacts and ways to minimize and avoid potential impacts, if necessary. SWCA will advise FBCED whether a permit is required and, if so, whether NWP 14 or IP is applicable. If no permit is required, the reports for Task 3 and 4 above will serve as agency non-reporting for the purposes for FBCED project administrative files.

ADDITIONAL ASSUMPTIONS/CONSIDERATIONS

- SWCA will be responsible for the daily management of the environmental services for this proposed project. Frequent and appropriate communications will be maintained between SWCA and FBCED in an effort to expedite completion of the project.
- SWCA assumes a 2-day effort utilizing a 2-person crew to complete the pedestrian natural resource survey.
- No archaeological field surveys and preparation of an Archaeological Resources Survey Report are included in this proposal. If these services are required after consultation with the USACE and THC, a Change Order can be provided.
- The ROW will be clearly demarcated in the field or an accurate .shp or .kmz file will be provided in advance of surveys to ensure an accurate assessment.
- SWCA assumes a maximum of one meeting with USACE and two meetings with FBCED and/or representative project engineering firm will be necessary for the Permitting Assessment (part of Task 4).
- SWCA assumes a maximum of two meetings with the USACE Galveston District will be necessary to discuss potential permitting.



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- No preparation of an NWP 14, Individual Permit and associated functional assessment under the CWA, Section 404 or any other permit preparation are included in this proposal. If these services are required after determination of potential impacts and consultation with USACE and FBCED, a Change Order can be provided.
- The cost does not include an approved jurisdictional determination (AJD). If the FBCED elects to pursue an AJD, the work will be covered under another scope and cost.
- The estimate is based on SWCA's current project understanding and subsequent design changes may warrant change orders.
- This scope and cost estimate does not include wetland delineation or functional habitat assessment of any proposed mitigation sites. Scope and cost assumes use of mitigation banks and does not include development of a PRM mitigation plan.
- Costs associated with significance testing or mitigation of archeological or historic resources are not included in this proposal.

COST ESTIMATE SUMMARY

SWCA's cost estimate, listed by task, is provided in the table below. **The TOTAL LUMP SUM AMOUNT for these tasks is \$29,996.** Invoicing will be once per month.

Table 1. Cost estimate by task.

TASK	DESCRIPTION	COST
1	Wetland Delineation	\$12,789
2	Wetland Delineation Reporting	\$9,328
3	Cultural Resources Constraints Analysis	\$2,069
4	Permitting Assessment	\$5,810
	TASKS 1 – 4 TOTAL	\$29,996



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If you have any questions or require any additional information, please call 281.617.3217 or e-mail (kwinkler@swca.com). Thank you for the opportunity to assist with this project.

Sincerely,

A handwritten signature in cursive script that reads 'Kerry Winkler'.

Kerry Winkler
Senior Project Manager

cc: Matt Stahman, SWCA, Houston Principal

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

**OFFICE USE ONLY
CERTIFICATION OF FILING**

Certificate Number:
2016-25509

Date Filed:
03/14/2016

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
SWCA Inc.
Houston, TX United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
Fort Bend County

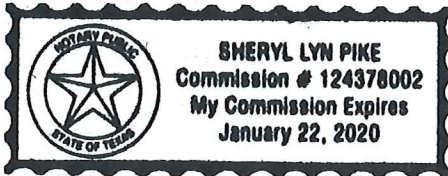
3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the goods or services to be provided under the contract.
#13211, #13201 and #13207
Amendment to add evaluation of need for USACE CWA

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary

5 Check only if there is NO Interested Party.

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.



Matt Stahman

Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Matt Stahman, this the 14th day of March, 2016, to certify which, witness my hand and seal of office.

Sheryl L. Pike

Signature of officer administering oath

Sheryl L. Pike

Printed name of officer administering oath

Office Administrator

Title of officer administering oath